What is claimed is:

1   1.   An apparatus comprising:
2   a pipeline resource having a plurality of address
3   spaces, each of the plurality of address spaces
4   corresponding to one of a plurality of address space
5   identifiers.

1   2.   The apparatus of claim 1, wherein the pipeline
2   resource comprises entries each including one of the
3   plurality of address space identifiers.

1   3.   The apparatus of claim 2, further comprising a
2   control register coupled to the pipeline resource to
3   provide the plurality of address space identifiers to the
4   entries.

1   4.   The apparatus of claim 2, wherein the entries are
2   selectively flushable.

1   5.   The apparatus of claim 2, wherein the entries
2   further include a thread identifier.

1   6.   The apparatus of claim 2, wherein the pipeline
2   resource comprises a translation lookaside buffer.

1   7.   The apparatus of claim 6, further comprising a
2 filter coupled to the translation lookaside buffer to
3 select at least one of the entries to be flushed.

1   8.   A method comprising:
2   associating an address space identifier with a value;
3 and
4   storing the value and the address space identifier in
5 a pipeline resource.

1   9.   The method of claim 8, further comprising storing
2 the value and the address space identifier in an entry of
3 the pipeline resource.

1   10.   The method of claim 9, further comprising
2 invalidating the entry if an update to the value occurs
3 during a context.

1   11.   The method of claim 10, further comprising
2 selectively flushing the entry after invalidating the
3 entry.

1   12.   The method of claim 10, wherein invalidating the
2 entry further comprises invalidating all non-global entries
3 of the pipeline resource.

1   13.   The method of claim 10, wherein invalidating the
2   entry further comprises invalidating all entries of the
3   pipeline resource associated with the address space
4   identifier.

1   14.   The method of claim 8, further comprising
2   associating a second address space identifier with a second
3   value; and
4   storing the second value and the second address space
5   identifier in the pipeline resource.

1   15.   The method of claim 8, further comprising hashing
2   the address space identifier with a portion of the value
3   before storing the value and the address space identifier.

1   16.   A system comprising:
2   a processor including a pipeline resource having a
3   plurality of address spaces, each of the plurality of
4   address spaces corresponding to one of a plurality of
5   address space identifiers; and
6   a dynamic random access memory coupled to the
7   processor.

1   17.   The system of claim 16, further comprising a
2   control register coupled to the pipeline resource to

3 provide the plurality of address space identifiers to the

4 pipeline resource.

1   18. The system of claim 16, wherein the pipeline

2 resource comprises entries each including one of the

3 plurality of address space identifiers.

1   19. The system of claim 18, further comprising a

2 hashing engine to hash one of the plurality of address

3 space identifiers with a portion of a value to be stored in

4 one of the entries.

1   20. An article comprising a machine-readable storage

2 medium containing instructions that if executed enable a

3 system to:

4   associate an address space identifier with a value;

5 and

6   store the value and the address space identifier in an

7 entry of a pipeline resource.

1   21. The article of claim 20, further comprising

2 instructions that if executed enable the system to

3 selectively flush the entry.

1   22.   The article of claim 20, further comprising
2   instructions that if executed enable the system to store a
3   thread identifier in the entry.

1   23.   The article of claim 20, further comprising
2   instructions that if executed enable the system to
3   associate a different address space identifier with a
4   second value, the different address space identifier
5   corresponding to a different active context than the
6   address space identifier.

1   24.   The article of claim 20, further comprising
2   instructions that if executed enable the system to
3   invalidate the entry if the value is updated during a
4   context.

1   25.   A method comprising:
2   providing a first address space identifier to a
3   pipeline resource during a first context;
4   storing the first address space identifier in a first
5   entry of the pipeline resource;
6   providing a second address space identifier to the
7   pipeline resource during a second context; and
8   storing the second address space identifier in a
9   second entry of the pipeline resource.

1   26.   The method of claim 25, further comprising
2   storing a first data value with the first address space
3   identifier in the first entry.

1   27.   The method of claim 26, further comprising
2   invalidating the first entry if an update to the first data
3   value occurs during the first context.

1   28.   The method of claim 26, further comprising
2   hashing the first address space identifier with at least a
3   portion of the first data value.

1   29.   The method of claim 25, further comprising
2   maintaining the first address space identifier in the first
3   entry during the second context.